Installation Materials
Tools:
- Utility knife
- Pencil
- Medium grit sandpaper
- Sanding block
- Smooth edge trowel
- Tape measure
- Short nap paint roller
- Chalk and chalk line
- Rolling pin
- Carpenter’s square
- S-184 Patch and Skim Coat for patching or filling textured surfaces
- S-194 Patch, Underlayment & Embossing Leveler
- S-195 Underlayment Additive
- S-185 Latex Primer

Additional materials for a grouted installation:
- 1/16” to 1/4” Tile Spacers
- Premixed Sanded Acrylic Grout
- Grout Float
- Square-edged Rigid Sponge
- Ammonia-based Cleaner
- Non-scratch White (3M) Scrub Pad

Installation Requirements
- Store tile in the room in which you plan to install for 48 hours. Keep room at minimum of 65° F (18° C) during that time and during installation. After installation, temperature should not fall below 65° F (18° C) for the first 48 hours, and not below 55° F (13° C) after that.
- If room is heated by radiant coils in the subfloor, the temperature of the floor surface should not exceed 85° F (29° C).
- The subfloor should be level, clean, and free of wax, grease, oil or dust.
- If necessary, patch or fill any cracks in the subfloor with Armstrong patch or latex underlayment.
- If installing over existing vinyl, use liquid underlayment or embossing leveler to smooth any texture or embossing on the old floor.
- Install over smooth, well-bonded resilient floors, ceramic, terrazzo, marble or over dry concrete and wood floors with a plywood overlay.

Estimating
Find your room size on chart. Number in square is how many cartons you need. Charts include at least five extra tiles per 100. These extra tiles are needed to allow for waste and odd room size.

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24 TILES PER CARTON

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16 TILES PER CARTON
**Prepare Subfloor**

**Step 1.** Inspect and prepare subfloor. Subfloor must be clean, dry, and smooth. A subfloor is the surface over which your new Armstrong® tile flooring is installed.

**NOTE:** Do not install over particleboard, waferboard or single-layer STURD-I-FLOOR® panels, existing resilient tile floors that are on or below grade, existing cushioned-vinyl flooring, carpet, strip wood or plank flooring.

**IF INSTALLING OVER...**

**VINYL FLOORING**

(only single-layer)

Must be noncushion-backed and firmly bonded. Check for loose vinyl, gapped seams, cuts, tears, rips, or other damage. Do not install over tile below grade level.

**PREPARE**

- Use a utility knife to remove loose vinyl.
- Use New Beginning Extra-Strength Floor Stripper to remove dirt and wax buildup.
- S-194 Patch, Underlayment & Embossing Leveler mixed with the S-195 Underlayment Additive to create embossing leveler or S-199 One Part Embossing Leveler fills and levels embossing on your old vinyl flooring.
- Use smooth edge trowel for applying S-194 and S-195 mixture or S-199.
- Use medium grit sandpaper and a sanding block for smoothing rough areas of S-194/S-195 mixture and/or underlayment.

**PLYWOOD**

If installing a new plywood subfloor, use APA Underlayment Grade. For new or existing plywood subfloors, check for loose panels, gapped joints, knots, nail holes, or other damage.

**PREPARE**

- S-184 Patch & Skim Coat or S-194 Patch, Underlayment & Embossing Leveler mixed with the S-195 Underlayment Additive to smooth and fill damaged areas or textured surfaces.
- Use smooth edge trowel for applying S-184 or S-194 and S-195 mixture.
- Use medium grit sandpaper and a sanding block for smoothing rough areas of S-194/S-195 mixture.
- Use S-185 Latex Primer for a superior bond.
- Use short nap paint roller for applying S-185.

**CONCRETE/CERAMIC**

Must be clean, dry and dust-free. Check for cracks, scaling, levelness, and other damage. Tiles can be installed over a painted concrete floor (self-stick only). If installing over ceramic tile, terrazzo, or marble, ensure that the tiles are firmly bonded.

**PREPARE**

- S-184 Patch & Skim Coat or S-194 Patch, Underlayment & Embossing Leveler mixed with the S-195 Underlayment Additive to smooth and fill damaged areas and for patching or leveling.
- Use smooth edge trowel for applying S-184 or S-194 and S-195 mixture.
- Use medium grit sandpaper and a sanding block for smoothing rough areas of the underlayment.
- Use S-185 Latex Primer for a superior bond.
- Use short nap paint roller for applying S-185 Latex Primer.

**Plan the layout**

**Step 1.** Find the center of each of the end walls and strike a chalk line at the center of the room.
Step 2. At the midpoint of the center line, create a perpendicular line using a carpenter’s square.

![Diagram](image1)

Step 3. Leave release paper on back of tile, and position tiles in one quadrant of the room to determine border tile size. Shift the starting line(s) 1/2 the dimension of the tile; i.e., shift 6" for a 12" tile to maximize border tile size, if necessary.

![Diagram](image2)

Precautions:
- When installing over an existing resilient floor, lay out the installation so the new seams are a minimum of 6" away from the original seams.
- When installing over tile floors, seams should fall in the center of the tile.

Install tile

Step 4. Peel release paper from tile and install at intersection. If grouting tiles, lay tiles with a 1/16" to 1/4" space at the joints utilizing tile spacers designed for this purpose. For non-grouted tiles, make sure tiles are butted tightly at all edges to prevent separation. For overall stone visuals, make sure arrows on back of tiles point in random direction. Install all other visuals with arrows on back of tile in the same direction. Install one quadrant of tile at a time. Lay tiles in pattern shown below, using chalk lines as a guide

![Diagram](image3)

Precaution:
- When using tile from two or more cartons, check to be sure all pattern and lot numbers are the same for proper color match.

Cutting the border tile

Step 5. For straight cuts place a loose tile (A) face up exactly on top of the last full tile, making sure the arrows are pointed in the proper direction. Place another full tile (B) on top of tile (A) with its edge against the wall. Using tile (B) as a guide, mark the face of tile (A) with a pencil. Cut border tiles with utility knife. For irregular cuts, make a pattern and transfer it to a tile.

![Diagram](image4)

Finish

Step 6. For non-grouted tiles roll installed tiles to bond to floor. DO NOT wet wash tile for at least five days after installation. This will allow the adhesive under the tile to dry and prevent excess moisture and cleaning agents from interfering with the adhesive bond. Replace wall base and mouldings.
Grouting Instructions

Prepare the floor

Step 1. Grouting can be done immediately after the tiles are installed. Before beginning the grouting process, remove spacers and thoroughly roll the tile to ensure they are firmly bonded to the subfloor. A premixed sanded acrylic grout with good flexural strength and adhesion is recommended. Traditional cement grouts are not recommended for use with Armstrong Crescendo tile.

Apply grout

Step 2. Follow the application instructions as specified on the premixed grout container, working small sections of the floor at a time. Do not allow the grout to dry hard on the face of the flooring before beginning the cleanup procedure. Work in small sections at a time. Use a "hard" epoxy grout float to apply the grout. Do not spread the grout over the entire surface of the tile as is customary with some ceramic tiles. Rather, try to apply the grout and pack it down only in the immediate area of the open joints to minimize cleanup. Then, hold the float almost vertical to the surface and strike off the excess grout, pulling the float diagonally across the joints. Do not allow the grout to dry hard on the face of the flooring before beginning the cleanup procedure. It is best to use two buckets of clear, cool water with sponges during the first cleanup. Firm, square-edged cellulose sponges typically work best for cleaning grout residue from the tile without pulling excessive grout from the joints. Use the first bucket and sponge to loosen the grout on the face of the tile and pick up most of the residue. Use the second bucket and sponge for final removal of the residue and for smoothing the joints. Always hold the sponge flat and wipe diagonally across the joints. Do not allow the rinse water to accumulate in the adjacent ungrouted joints.

Clean the tile

Step 3. If grout sponges alone are not sufficient to clean the face of the tile, a white 3M pad with light pressure may be used. A clean damp flat cellulose sponge will aid in removing any grout haze remaining on the tiles. Traffic should be kept off the installation until the grout has completely dried, usually 24 hours.

Step 4. After the recommended dry time, Armstrong™ Once ‘n Done No-Rinse Floor Cleaner and a white 3M pad can be used to remove any slight haze of grout residue that may be present. Armstrong™ Once ‘n Done No-Rinse Floor Cleaner should also be used for continued routine maintenance. Do NOT use Armstrong New Beginning or other floor strippers for cleaning the grout or maintaining the Rounded Edge Tile installation when it is grouted, as they are too harsh and will degrade acrylic grouts.

Finish

Step 5. DO NOT wet wash tile for at least five days after installation. This will allow the adhesive under the tile to dry and prevent excess moisture and cleaning agents from interfering with the adhesive bond. Replace wall base and moldings.